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Application No.: 10/635,424

MAY 10 2007

Serial No.: JCLA11962-R2

REMARKSPresent Status of the Application

All pending claims 1, 3-7 and 11-14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sisson (US 4,107,364) in view of Collier (US 5,260,126).

In response thereto, Applicants have further amended claims 1 & 11, canceled claim 14 and submitted the following remarks. Reconsideration of claims 1, 3-7 and 11-13 is respectfully requested.

Discussions of Amendments to Claims 1 & 11

The amendments to claims 1 & 11 are supported by paragraphs [0060] and [0062] (in US 2004/0067710 as the publication of this application). It is believed that the amendments raise no new issue needing further search, for i) the first amendment (spun thereon) of claim 1 has been shown in previous claim 11, ii) the scope of "a spinneret" covers "spinnerets", and iii) the second amendment (uniformly) of claim 1/11 such that the long elastomeric fiber and long non-elastomeric fiber are *uniformly* mixed is just a matter inherently resulting from the use of the spinneret in claim 1/11.

Discussions of Rejections under 35 U.S.C. 103(a)

A feature (feature 1) of claim 1/11 is that the long elastomeric fiber and the long nonelastomeric fiber are *uniformly* mixed together to form one layer of nonwoven fabric with a spinneret having both a spinning hole for discharging elastomeric resin and another spinning hole for discharging nonelastomeric resin thereon.

Examiner asserted that Sisson explicitly discloses, in col. 14, lines 35-37 & 59-63, that the elastomeric and non-elastic filaments may be mixed in a generally homogeneous layer forming cloth 20 of their invention. However, Applicants respectfully point out that the homogeneity or

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uniformity of the fiber mixing in Sisson is **not achieved via a spinneret** and is **much lower than that achieved via the spinneret described in claim 1/11**.

More specifically, Sisson describes in col. 6, lines 42-47 of that a nonwoven fabric thereof can be fabricated with one or more spinnerets. Col. 5, line 65-col. 6, line 27 and Fig. 14 teach to spin one kind of resin by one spinneret, Fig. 6 and the related description teach to spin **two** kinds of resins by **two** spinnerets respectively and laminate the two layers formed, and Fig. 19 and the related description teach to spin **three** kinds of resins by **three** spinnerets respectively and laminate the three layers formed. It is apparent that none of the above processes uses a spinneret with both a spinning hole for discharging elastomeric resin and another spinning hole for discharging nonelastomeric resin to mix the elastomeric and nonelastomeric filaments, and Sisson fails to suggest or imply to use such a spinneret.

Moreover, according to col. 6, lines 49-56 of Sisson, the elastomeric filaments and the nonelastomeric filaments are mixed and intermingled prior to the collection thereof on the forming surface **by conducting the filament forwarding with a single forwarding means**, such as an air aspirator or single belt means, in Sisson. It is apparent to a person of ordinary skill in the art that mixing of a layer of elastomeric filaments and a layer of nonelastomeric filaments in Sisson is much less uniform than that achieved in a case where a spinneret of claim 1/11 is used, **for the two kinds of filaments are mixed as formed in the latter case**.

Accordingly, the process limitation of using the spinneret of claim 1/11 **results in a structural feature of the nonwoven fabric** and is thus an effective feature for material-type claims 1 and 11.

Examiner also asserted that the Bd/Ad value (1.32, Example 1) taught by the prior art (Sisson) meet the preferred disclosed diameters (≥ 1.39) of this invention assuming that the values exemplified in Applicants' arguments correspond to the materials of the prior art.

Applicants respectfully submit that one of ordinary skill in the art is not motivated to increase the Bd/Ad value of the prior art to the claimed range ($\text{Bd/Ad} \geq 1.39$, feature 2) for at least the reasons set forth.

As mentioned in previous Arguments, the above feature 1 and 2 are for increasing the coverage ratio of the elastomeric fiber, and a larger coverage ratio of the elastomeric fiber means a better anti-blocking property (see [0066]-[0067]). The claimed range of Bd/Ad is provided in

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combination with the above feature 1 of claim 1/11, and the anti-blocking property made by merely increasing the Bd/Ad value of the prior art without the above feature 1 is relatively low.

Accordingly, when feature 1 is absent as in the case of Example 1 of Sisson where a three-layer laminate was formed by laminating three filament layers (see col. 17, lines 1-27), increasing the Bd/Ad value of the prior art is meaningless and is therefore non-obvious.

Moreover, the above features 1 and 2 are particularly effective when the amount of the nonelastomeric fibers is much less than that of the elastomeric fibers, in consideration that the ratio of the long elastomeric fibers to the long nonelastomeric fibers ranges from 50/50 to 95/5 broadly in this invention. It is noted that the coverage ratio of the elastomeric fibers in Sisson is insufficient when the amount of nonelastomeric fibers is 1/19 (=5/95) of that of the elastomeric fibers because of the incomplete mixing of the elastomeric and nonelastomeric fibers.

On the contrary, with the above feature 1 (and feature 2 in option), the coverage ratio of the elastomeric fibers in the nonwoven fabric of claim 1/11 is kept large even when the amount of the nonelastomeric fibers is merely 1/19 (=5/95) of that of the elastomeric fibers due to the complete mixing, so that the nonwoven fabric formed has good anti-blocking property over the entire range (50/50 to 95/5) of the ratio of the long elastomeric fibers to the long nonelastomeric fibers.

Briefly speaking, without recognizing the importance of the coverage ratio of the elastomeric fibers, one of ordinary skill in the art is not motivated to improve the method of mixing the elastomeric fibers with the nonelastomeric fibers, or increase the Bd/Ad ratio, to increase the coverage ratio of the elastomeric fibers.

For at least the above reasons, the above feature 1 in claims 1 and 11 and feature 2 in claim 1 are non-obvious over the prior art. It is also noted that Collier also fails to suggest or imply the above features 1 and 2.

For at least the above reasons, Applicants respectfully submit that independent claims 1 & 11 and claims 3-7, 13 & 12 dependent therefrom all patently define over the prior art.

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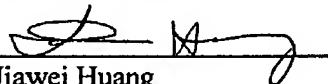
CONCLUSION

For at least the foregoing reasons, it is believed that claims 1, 3-7 and 11-13 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

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